

# Impact of Stress, Psychological Distress and Organizational Commitment on Business Education Teacher's Productivity

Bharathi A<sup>1</sup>, Dr. H. Prakash<sup>2</sup>

<sup>1</sup>Research Scholar, Government Ramnarayan Chellaram College of

Commerce and Management, Race Course Road, Bangalore, Karnataka, India

<sup>2</sup>Director and HOD, Department of Commerce, Maharani Cluster University, Bangalore, Karnataka, India

## ABSTRACT

**Aim:** The changing technology, economic conditions and global competition have made the role of management education crucial for the success of individuals and the industry. The business educators are increasingly concerned with preparing the students for the competitive market. Stress negatively affects the varied efforts of business educators to produce talented workforce. The main objective of the study was to explore the effects of stress and psychological distress on the productivity of business teachers.

**Methods:** A deductive approach was adopted for framing the hypotheses and a structured questionnaire was used for collecting data. The research participants were business educators (n=408) working in Karnataka, India. SPSS AMOS was adopted to fit a structure equation model on the data collected and study the structural relationships among the variables.

**Results:** The findings revealed that the stress and psychological distress experienced by business educators significantly and negatively affected their productivity (teaching productivity, research productivity and student outcomes). However, the organizational commitment of the teachers enhanced their productivity. **Implications:** Based on the results, it is implied that business education administrators must take efforts and develop strategies to help business teachers cope with stress in order to achieve academic outcomes.

**KEYWORD:** Stress, Psychological distress, Commitment, Teaching productivity, Research productivity, Student outcomes

## INTRODUCTION

Productivity is a measure of comparative performance between the results produced and the resources utilized for the same (Utami, Matin, & Sutjipto 2018). The productivity of teachers has garnered increased attention due to its significance in the advancement of knowledge through education (Kagwiria & Amukowa, 2013; Emunemu & Isuku, 2012). Being one of the most powerful predictors of student outcomes (Blazar, 2016; Good, 2014; Kaplan & Owings, 2004), the success of an educational system depends largely on the caliber and productivity of its teachers (Obiechina, Abraham & Nwogu, 2018). It acts as a supporting framework to ensure that the investment made in education produces desirable results. The productivity of teachers can however be depressed by the stress experienced by them in the profession (Rizvi & Mangal, 2018).

Stress, on the other hand, can be defined as a process of "behavioral, emotional, mental, and physical reactions caused by prolonged, increasing, or new pressures that are significantly greater than the availability of coping strategies" (Durham, 1992). The stress experienced by the teachers puts their physical as well as psychological health at risks (Pepe et al., 2018). Apart from stress, teachers also have to endure high levels of psychological distress (Fiorilli et al., 2017; Pepe, Addimando, Dagdukee & Veronese, 2019). The consequences of their prolonged exposure to stress

causes psychological strain which manifests in the form of impaired work performance and poor teaching efficiency (Addimando, 2019; Capone & Petrillo, 2018). Hence, it is crucial to investigate the effects of stress and psychological distress on the productivity of teachers from a broader educational perspective in order to protect academic outcomes. Apart from stress, the organizational commitment experienced by the teachers also act as a significant predictor of their productivity (Hettiararchchi and Jayarathna, 2014; Tolentino, 2013).

In the context of business education, the concept of stress and its impact on teacher's productivity has not been researched widely. The significant and ever increasing developments being made in field of technology and the continued globalization of business expands the scope of business markets within which the business graduates compete following their education (Boronico, 2008). The business educators are therefore required to employ dynamic strategies to prepare the students for this dynamic market. The teachers are also constantly required to update their domain specific knowledge and exhibit the skills they are assumed to be able to teach. Such requirements put them under immense stress. Keeping the dynamic nature of business field in mind and from the perspective of teachers for the emerging leaders of tomorrow, understanding the

**How to cite this paper:** Bharathi A | Dr. H. Prakash "Impact of Stress, Psychological Distress and Organizational Commitment on Business Education Teacher's Productivity"

Published in International Journal of Trend in Scientific Research and Development (ijtsrd), ISSN: 2456-6470, Volume-5 | Issue-1, December 2020, pp.920-926, URL: [www.ijtsrd.com/papers/ijtsrd38093.pdf](http://www.ijtsrd.com/papers/ijtsrd38093.pdf)



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impact of stress experienced by them on their productivity is the need of the hour.

Thus, identifying factors that affect the productivity of business educators would contribute to the advancement of existing knowledge both theoretically (in terms of developing a model to study the productivity of business educators) and practically (in terms of suggesting measures to improve the productivity of teachers). In light of this background, the present study intends to explore the relationships among stress, psychological distress, organizational commitment and productivity of teachers in the context of business education.

### Consequences of teacher stress

Stress is a significant predictor of psychological distress experienced by teachers. Psychological distress refers to subjective emotional distress that are usually articulated by means of various symptoms like anxiety, depression, reactions to grief, and similar other psychological conditions (Fortin et al., 2006). Chaplain (2008) found that the stress due to workload, lack of support, pupil's disruptive behavior and other factors attributed to occupational stress was a strong predictor of the psychological distress experienced by the teachers. Similarly, long working hours was also found to cause psychological distress among the male Japanese teachers by Bannai, Ukawa and Tamakoshi (2014). Leung, Siu and Spector (2000) reported that university teachers' perceived organizational practices and home/work interface, both significant sources of stress, best predicted the psychological distress experienced by them. In line with these studies, the relationship between psychological distress and stress have been tested in the present study using the following hypothesis:

H1: Stress has a significant impact on the psychological distress experienced by teachers

The high levels of stress and exhaustion due to work experienced by teachers have a significant impact on their organizational performance in the form of reduced commitment (Nagar, 2012). Ateş and İhtiyaroğlu (2018) who studied the causal relationship between stress and organizational commitment in employees from different sectors like education, health and tourism, found that the impact varied according to the sector. In the education sector, the impact of stress on commitment was found to be negative. Li, Liu, Yuan and Ju (2017) have also presented evidence for the adverse effect of stress on the organizational commitment of Chinese university faculties. An indirect impact through job satisfaction and job engagement was also observed by them. A study by Yuan and Liu (2017) also found that job stress significantly and negatively affected the organizational commitment of employees. The study identified both significant direct and indirect effect of stress on commitment through job engagement and burnout. Based on these findings, we propose the following to be tested in our study:

H2: Stress has a significant direct impact on the organizational commitment of teachers

Banerjee and Mehta (2016) found that stress experienced by the teachers of B schools due to work overload and poor interpersonal relationships had an impact on their job performance in terms of job avoidance, work-dissatisfaction, absenteeism and low productivity. A study by Adewale,

Ghaviyekr and Abdulsalam (2017) on the academic staff members from Nigerian universities showed that university faculties experience social, psychological, academic, student-imposed, and job-related stress, which in turn has a significantly and adversely affects their performance. A number of studies like Mbatha (2018), and Ayub, Hussain and Ghulamullah (2018) have also ascertained the negative influence of stress on the productivity of educators. Therefore, we propose the following for the study:

H3: Stress has a significant impact on the productivity of teachers

### Psychological distress

There exists a great amount of evidence for the negative influence of psychological distress on performance of employees. It has been reported that psychological conditions like psychological distress decreases productivity at work (presenteeism) and increases work-related absences (absenteeism). For instance, a research conducted by Cocker et al. (2013) reported that psychological distress was associated with the presenteeism and absenteeism in SME managers/ owners. Holden et al. (2011) upon exploring the health conditions that affect productivity in working Australians found that along with drug and alcohol addiction, psychological distress had a huge influence on the rates of absenteeism and presenteeism in employees, compared to other health conditions that were considered in the study. Becher and Dollard (2016) reported that employees who experience psychological distress took more sick leaves per month than average and contributed to loss in higher productivity compared to those who did not experience psychological distress. In line with these studies, the current study also explores the adverse relationship between psychological distress and the productivity of teachers in the context of business education, using the following hypothesis:

H4: Psychological distress experienced by teachers has a significant impact on their productivity

### Organizational Commitment

Organizational commitment of teachers implies their willingness "to expend personal, temporal and psychological resources on behalf of teaching" (Mowday, Porter & Steers, 2013). According to Allen and Meyer (1991), organizational commitment is "a psychological state that characterizes an employee's relationship with the organization and reduces the likelihood that he/ she will leave the organization". In other words, it can be inferred that organizational commitment reflects the rational behavior of employees to protect their professional and employment assets in the forms of salary, benefits and tenure (Bar-Haim, 2007). Organizational commitment comprises of three facets, namely, affective, normative and continuance commitment (Allen and Meyer, 1991). According to Meyer and Allen (1984), "affective commitment refers to the affirmative feelings of belongingness and attachment to the affairs of an employing organization; whereas, normative commitment represents their understanding of their obligation to remain in the organization." The continuance facet of commitment refers to "the degree of commitment that the employees exhibit towards their organization when they consider the penalty of leaving the organization" (Meyer & Allen, 1984).

The existence of a positive relationship between the organizational commitment of employees and their

productivity in terms of performance has been posited by various studies in the academic settings. For instance, Tolentino (2013) found that the organizational commitment of teachers had an impact on their teaching skills and classroom management. Hettiararchchi and Jayarathna (2014) reported that work related attitudes of teachers such as their organizational commitment, satisfaction and job involvement significantly predicted their job performance. Similarly, studies like Kawiana, Dewi, Martini and Suardana (2018), Osa and Amos (2014) have also found a significant positive association between employee commitment and their job performance. With respect to research productivity, a study by Becker, Kernan, Clark and Klein (2018) found that commitment to the profession had an impact on the intrinsic motivation of university teachers to engage in research activities which ultimately led to the setting up of more challenging research goals, commitment towards accomplishing those goals, spending quality time on doing research, all of which ultimately resulted in high levels of research productivity. Further, Perry, Hunter and Currall (2016) found that the organizational and professional commitment of employees working in research focused organizations has an impact on their research approach (i.e. on their innovation orientation). Based on the above discussion, we propose the following to be tested in the study:

H5: Organizational commitment of teachers has an impact on their productivity

### Productivity of teachers

The productivity of teachers usually refer to the output produced by the teachers based on the inputs utilized. This output usually refers to the quality of students produced due to their effective teaching in classrooms (Giami, Oluwuo & Anyamele, 2018). The workload of academics involve two activities, teaching and research (Cadez, Dimovski, & Zaman Groff, 2017). The teaching effectiveness and research productivity of teachers were reported to be two uncorrelated and totally independent constructs by Marsh and Hattie (2002). However, studies like Galbraith and Merrill (2012) reported that the involvement of faculties in research activities is significantly related to their teaching effectiveness, as some teachers reported that their research activity enhanced their teaching. Thum (2003) reported that teacher effectiveness can be measured based on student assessment. Various studies have asserted the effectiveness of teaching as a measure of student outcomes (Goldhaber & Startz, 2017; Ndugu, 2014; Harris & Sass, 2011). Therefore, based on the above discussion, the productivity of teachers was studied in terms of teaching productivity, research productivity, and student outcomes in the study.

Certain gaps were identified from the literature review. Lack of studies investigating the cause of psychological distress experienced by teachers who teach management education have been found. Further, studies that explore the influence of psychological distress on the productivity of business educators have also been found to be minimum, in spite of realizing the increasing complexity and workload involved in providing business education. Recent studies that investigate the impact of teachers' commitment on their research productivity were found to be minimum (except Becker et al., 2018). There exists dearth of studies exploring this relationship among the management educators as well.

Overall, it was found that in the context of business education the effects of stress on productivity have not been explored widely and recently. The present study is an attempt to bridge these gaps in literature and add to the burgeoning body of knowledge on the impact of stress on academic outcomes.

## Methodology

### Design and Participants

The descriptive study adopted a deductive approach to describe the effects of stress on the productivity of Business educators. Based on prior literature, hypotheses were framed and tested. The study is empirical nature, accordingly quantitative data was gathered using a structured questionnaire. Structural Equation Modelling (SEM) was employed to develop a model that represents the relationships among the study variables. AMOS 7.0 in SPSS was employed for carrying out the SEM analysis.

The research sample included 408 Business educators working in Karnataka. A majority of the sample (70%) were above 30 years of age and were married employees (79%). Females constituted as majority (67%) of the population. Further, it was found that 78% of the respondents worked as assistant professors and as full-time employees (87%). Lastly, around 80% of the sample population were found to have more than 6 years of experience in the field which rendered the sample suitable for analyzing the research phenomenon.

### Scales of measurement

Psychological distress manifests itself as symptoms of mental illness and anxiety. Stress manifests itself in the form of physical conditions like sleep disturbances. Therefore, in order to explore the effects of *Psychological distress* on productivity, it was conceptualized and measured as physical and mental stress. Allen and Meyers' (1991) conceptualization of *Organizational Commitment* as three distinct components (such as affective, normative, and continuance) was adopted in the study to measure the organizational commitment of Business educators. Lastly, *Productivity* of the Business educators was measured in terms of teaching productivity, Student outcomes and Research productivity. The constructs were measured using scales that were assigned a five-point Likert scale [ranging from 1-Strongly Disagree to 5-Strongly Agree].

## Results and discussion

### Test of measurement model

Confirmatory Factor Analysis (CFA) was carried out to assess the reliability and validity of the measures used in the study. The results are provided in Table 1. The standardized regression weights were found to be greater than 0.7 for most of the items except for a few. However, for these items also the t-values were found to be significant at the 0.001 level. It can be observed that all the items loaded under the respective sub-factor. This confirms the validity of the items in measuring the construct. The squared multiple correlations for all the items were found to be within the range of 0.180 and 0.810 which indicates that at least 18% variance in the indicators were explained by the underlying constructs. The measurement model was thus found to be valid and hence retained for constructing the structural model (shown in Figure 1).



**Table 1 Measurement model**

Latent Variable	Item	SRW	t-value	R-squared
Psychological distress	MS_1	0.425	8.211	0.180
	MS_2	0.651	12.721	0.424
	MS_3	0.719	14.094	0.517
	MS_4	0.732		0.536
	MS_5	0.889	17.365	0.791
	MS_6	0.827	16.275	0.684
	PS_1	0.639	8.418	0.408
	PS_2	0.803	9.252	0.645
	PS_3	0.526	7.563	0.277
	PS_4	0.439	6.734	0.193
	PS_5	0.621	8.302	0.386
	PS_8	0.510	7.421	0.260
	PS_9	0.515	7.467	0.265
	PS_10	0.487		0.237
Organizational commitment	AffC_1	0.681	14.736	0.463
	AffC_2	0.900	21.317	0.810
	AffC_3	0.859	19.997	0.738
	AffC_4	0.820	18.755	0.672
	AffC_5	0.800		0.64
	CntC_1	0.722	15.218	0.522
	CntC_2	0.721	15.186	0.52
	CntC_3	0.822	17.777	0.675
	CntC_4	0.710	14.897	0.504
	CntC_5	0.792		0.627
	NC_1	0.779		0.606
	NC_2	0.852	14.867	0.726
	NC_3	0.724	13.872	0.524
Teacher's productivity	RP_2	0.597	8.411	0.357
	RP_3	0.706	9.180	0.498
	RP_4	0.648	8.798	0.420
	RP_5	0.690	9.080	0.476
	RP_6	0.604	8.461	0.364
	RP_7	0.577	8.240	0.332
	RP_8	0.555	8.050	0.308
	RP_9	0.485	7.382	0.235
	RP_10	0.506		0.256
	SO_1	0.842	10.176	0.710
	SO_2	0.766	9.847	0.587
	SO_5	0.515		0.266
	SO_9	0.436	6.998	0.190
	TP_1	0.736	15.158	0.542
	TP_2	0.747	15.415	0.559
	TP_3	0.694	14.208	0.482
	TP_4	0.659	13.417	0.434
	TP_5	0.850	17.804	0.722
	TP_6	0.722	14.838	0.521
	TP_7	0.877	18.464	0.770
	TP_8	0.778	16.114	0.605
	TP_9	0.746		0.557

SRW – Standard Path Coefficient; MS- Mental Stress; PS- Physical Stress; AffC- Affective Commitment; CntC- Continuance Commitment; NC – Normative Commitment; RP- Research Productivity; SO- Student Outcomes; TP- Teaching Productivity

### Test of structural model

A variety of indices were used in the study for determining the fitness of the data gathered to the model developed. It can be observed that the value of Chi-square (CMIN/DF) is 4.332, NFI is 0.892, RFI is 0.829, IFI is 0.915, TLI is 0.863, CFI is 0.913 and RMSEA is 0.090. Most of the indices were found to be within the recommended limits which indicates that the data is a good fit for the model and the model can be adopted for studying the structural relationships among the variables. The results of hypotheses testing and the path coefficients of the structural model can be studied from Table2. The results provided support for all the hypotheses. All the factors, stress ( $B=-0.248$ ), psychological distress ( $B=-0.471$ ), and organizational commitment ( $B=0.9$ ) had a significant impact on the productivity of teachers. Commitment had the greatest impact on productivity whereas stress and psychological distress had adverse significant impact on productivity. Further, stress had a direct positive impact on

psychological distress ( $B=0.846$ ) and negative impact on the organizational commitment of business teachers ( $B=-0.395$ ). Therefore, the study hypotheses H1 through H5 were accepted.

**Table 2 Hypothesis testing**

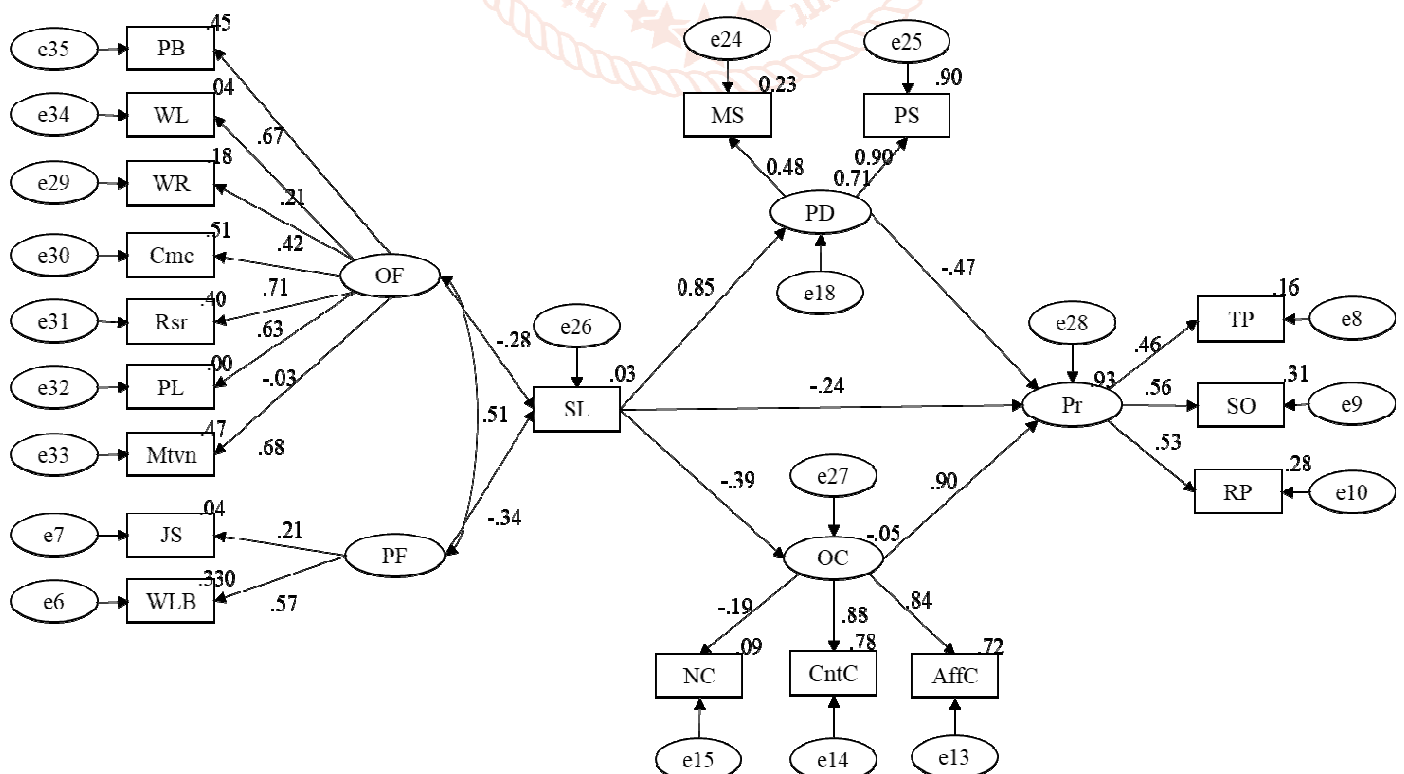
Hypothesis	Path	Path coefficient	t-value	Result
H3	Productivity <--- Stress Level	-0.248	-2.275*	Supported
H4	Productivity <--- Psychological Distress	-0.471	-4.296***	Supported
H1	Psychological Distress <--- Stress Level	0.846	10.33***	Supported
H2	Organizational Commitment <--- Stress Level	-0.395	5.828***	Supported
H5	Productivity <--- Organizational Commitment	0.900	9.85***	Supported

\*  $p < 0.05$ , \*\*\*  $p < 0.001$ ; Model fit indices: CMIN/DF - 4.332; NFI - 0.892; RFI - 0.829; IFI - 0.915; TLI - 0.863; CFI - 0.913; RMSEA - 0.090

The stress experienced by the business educators had a significant impact on their psychological distress which is a mental health problem characterized by anxiety and depression. Stress is thus a significant predictor of the mental health problems experienced by business education teachers. Similar findings were reported on teachers in general by Bannai, Ukawa and Tamakoshi (2014) and Chaplain (2008). Further, the stress experienced by the business teachers adversely affected their teaching productivity, research productivity and student outcomes. As the stress levels increased, their performance in the class reduced (Banerjee and Mehta, 2016; Adewale, Ghavifekr and Abdulsalam, 2017; Ayub, Hussain and Ghulamullah, 2018) so did their interest in participating in research activities. It was found that as the stress levels increase, their interest in planning for the class, using different pedagogical methods, obtaining feedback from students, and developing teaching skills decreases. Further, the level of stress experienced by teachers posited a strong influence in augmenting their research endeavors such as interest in publishing research articles, guiding other students in their research activities, and also working in various research projects. The stress experienced by business teachers also affected the academic outcomes of their students in terms of their assimilation ability, gaining knowledge, being disciplined and attitude towards studies.

The study results also support the earlier findings which showed that mental well-being of employees affects their performance (Cocker et al., 2013; Holden et al., 2011) by showing that the psychological distress experienced by business teachers significantly and negatively affected their productivity. The mental well-being of teachers is very much important for their performance in the classroom, participation in research activities and improving the academic performance of their students. The study results thus show that academic outcomes are significantly predicted by the stress and psychological distress experienced by the teachers.

Yet another significant predictor of business teachers' productivity was found to be their commitment towards the organization. Their levels of commitment towards their organization predicted their performance in the job (Hettiararchchi and Jayarathna, 2014; Tolentino, 2013) as well as their motivation in research (Perry, Hunter and Currall, 2016; Kernan, Clark and Klein, 2018).



**Figure 1 Structural model for the study**

## Conclusion

Information specific to the business education sector regarding the prevalence of psychological distress, and organizational commitment among teachers and the associated factors affecting these are needed for developing guidelines for managing the same and for promoting productivity in the business education sector. The present study found that organizational commitment and psychological distress affected the productivity of business teachers. While the former had a positive impact on productivity, the later negatively affected the productivity of teachers. Stress which is the most common predictor of Psychological distress also had a direct and adverse impact on the productivity of business teachers. In the light of these findings, the study suggests that the administrators of business education must take measures to regularly evaluate the physical and mental stress experienced by the teachers and take steps when needed to support them to combat stress. The teachers can be provided with all the support including resources and infrastructure facilities to deal with stress and get involved in research activities. Adequate training and workshops/ conferences must be conducted to help them update their knowledge in the dynamic business field and transfer the same to the students so that they are better equipped to face the job market.

## References

- [1] Addimando, L. (2019). The effect of positive working conditions on work engagement and teaching classroom practices: a large cross-sectional study in Switzerland. *Frontiers in Psychology*, 10, 2129.
- [2] Adewale, A. S., Ghavifekr, S., & Abdulsalam, I. (2017). Impact of stress on academic staff: Implication for higher education management and leadership. *Malaysian Online Journal of Educational Management*, 5(2), 75-91.
- [3] Ateş, Ö. T., & İhtiyaroğlu, N. (2018). Analysis of the Relationship between Stress and Organizational Commitment in Employees: A Meta-Analysis Study. *Journal of Education and Training Studies*, 7(1), 94-106.
- [4] Ayub, A., Hussain, M. A., & Ghulamullah, N. (2018). Causes and Impact of Work Stress on Teacher's Performance in Urban Primary Schools. *Journal of Research in Social Sciences*, 6(1), 81-100.
- [5] Banerjee, S., & Mehta, P. (2016). Determining the antecedents of job stress and their impact on job performance: A study among faculty members. *IUP Journal of Organizational Behavior*, 15(2).
- [6] Bannai, A., Ukawa, S., & Tamakoshi, A. (2014). Long working hours and psychological distress among school teachers in Japan. *Journal of Occupational Health*, 57(1), 20-27.
- [7] Bar-Haim, A. (2007). Rethinking organizational commitment in relation to perceived organizational power and perceived employment alternatives. *International Journal of Cross Cultural Management*, 7(2), 203-217.
- [8] Becher, H., & Dollard, M. F. (2016). Psychosocial and better productivity in Australian workplaces; Costs, productivity, presenteeism, absenteeism, Safe Work Australia.
- [9] Becker, T. E., Kernan, M. C., Clark, K. D., & Klein, H. J. (2018). Dual commitments to organizations and professions: Different motivational pathways to productivity. *Journal of Management*, 44(3), 1202-1225.
- [10] Blazar, D. (2016). Teacher and Teaching Effects on Students' Academic Performance. *Attitudes, and Behaviors*.
- [11] Boronico, J. (2008). The Challenges of Contemporary Business Education. *Journal of Public Hospital Marketing and Public Relations*, 18(2), 221-222.
- [12] Cadez, S., Dimovski, V., & Zaman Groff, M. (2017). Research, teaching and performance evaluation in academia: the salience of quality. *Studies in Higher Education*, 42(8), 1455-1473.
- [13] Capone, V., & Petrillo, G. (2018). Mental health in teachers: Relationships with job satisfaction, efficacy beliefs, burnout and depression. *Current Psychology*, 39(1), 1757-1766.
- [14] Chaplain, R. P. (2008). Stress and psychological distress among trainee secondary teachers in England. *Educational Psychology*, 28(2), 195-209.
- [15] Cocker, F., Martin, A., Scott, J., Venn, A., & Sanderson, K. (2013). Psychological distress, related work attendance, and productivity loss in small-to-medium enterprise owner/managers. *International Journal of Environmental Research and Public Health*, 10(10), 5062-5082.
- [16] Durham, J. (1992). *Stress in Teaching* (2nd Ed.). London: Routledge.
- [17] Emunemu, B. O., & Isuku, E. J. (2012). Improving teacher productivity and performance for better learning outcomes in Nigerian public secondary schools. *Journal of Pedagogical Thought*, 5, 53-71.
- [18] Fiorilli, C., De Stasio, S., Di Chiacchio, C., Pepe, A., & Salmela-Aro, K. (2017). School burnout, depressive symptoms and engagement: Their combined effect on student achievement. *International Journal of Educational Research*, 84(1), 1-12.
- [19] Fortin, M., Bravo, G., Hudon, C., Lapointe, L., Dubois, M. F., & Almirall, J. (2006). Psychological distress and multimorbidity in primary care. *The Annals of Family Medicine*, 4(5), 417-422.
- [20] Galbraith, C. S., & Merrill, G. B. (2012). Faculty research productivity and standardized student learning outcomes in a university teaching environment: a Bayesian analysis of relationships. *Studies in Higher Education*, 37(4), 469-480.
- [21] Giami, C. B. N., Oluwuo, S. O., & Anyamele, S. C. (2018). Succession Planning and Teachers' Productivity in Public Senior Secondary Schools in Rivers State, Nigeria. *International Journal of Innovative Social & Science Education Research*, 6(2), 76, 81.
- [22] Goldhaber, D., & Startz, R. (2017). On the distribution of worker productivity: The case of teacher effectiveness and student achievement. *Statistics and Public Policy*, 4(1), 1-12.

- [23] Good, T. L. (2014). What do we know about how teachers influence student performance on standardized tests: And why do we know so little about other student outcomes. *Teachers College Record*, 116(1), 1-41.
- [24] Harris, D. N., & Sass, T. R. (2011). Teacher training, teacher quality and student achievement. *Journal of Public Economics*, 95(7-8), 798-812.
- [25] Hettiararchchi, H. A. H., & Jayarathna, S. M. D. Y. (2014). The effect of employee work related attitudes on employee job performance: A study of tertiary and vocational education sector in Sri Lanka. *IOSR journal of Business and Management*, 16(4), 74-83.
- [26] Holden, L., Scuffham, P. A., Hilton, M. F., Ware, R. S., Vecchio, N., & Whiteford, H. A. (2011). Health-related productivity losses increase when the health condition is co-morbid with psychological distress: findings from a large cross-sectional sample of working Australians. *BMC Public Health*, 11(1), 417.
- [27] Kagwiria, K. J., & Amukowa, W. (2013). Teacher's Productivity in Promoting Quality Education in Public Primary Schools in Kenya. *Academic Journal of Interdisciplinary Studies*, 2(2), 365-365.
- [28] Kaplan, L. S., & Owings, W. A. (2004). Introduction to special issue: Teacher effectiveness.
- [29] Kawiana, I. G. P., Dewi, L. K. C., Martini, L. K. B., & Suardana, I. B. R. (2018). The influence of organizational culture, employee satisfaction, personality, and organizational commitment towards employee performance. *International Research Journal of Management, IT and Social Sciences*, 5(3), 35-45.
- [30] Leung, T. W., Siu, O. L., & Spector, P. E. (2000). Faculty stressors, job satisfaction, and psychological distress among university teachers in Hong Kong: The role of locus of control. *International Journal of Stress Management*, 7(2), 121-138.
- [31] Li, P., Liu, Y., Yuan, P., & Ju, F. (2017). The Study on the Relationship between University Faculties' Job Stress and Organizational Commitment in China. *Procedia computer science*, 122, 642-648.
- [32] Marsh, H. W., & Hattie, J. (2002). The relation between research productivity and teaching effectiveness: Complementary, antagonistic, or independent constructs? *The Journal of Higher Education*, 73(5), 603-641.
- [33] Mbatha, K. K. (2018). *Influence Of Stress On Health And Productivity Of Teachers In Private Primary Schools: A Case of Nairobi County, Kenya* (Doctoral dissertation, University of Nairobi).
- [34] Meyer, J. P., & Allen, N. J. (1984). Testing the "side-bet theory" of organizational commitment: Some methodological considerations. *Journal of Applied Psychology*, 69(3), 372.
- [35] Meyer, J. P., & Allen, N. J. (1991). A three-component conceptualization of organizational commitment. *Human Resource Management Review*, 1(1), 61-89.
- [36] Mowday, R. T., Porter, L. W., & Steers, R. M. (2013). *Employee—organization linkages: The psychology of commitment, absenteeism, and turnover*. Academic press.
- [37] Nagar, K. (2012). Organizational commitment and job satisfaction among teachers during times of burnout. *Vikalpa*, 37(2), 43-60.
- [38] Ndugu, M. M. (2014). Quality and productivity of teachers in selected public secondary schools in Kenya. *Mediterranean Journal of Social Sciences*, 5(5), 103.
- [39] Obiechina, F. N., Abraham, N. M., & Nwogu, U. J. (2018). Perceived Impact of School Environmental Insecurity on Teachers' Productivity in Public Secondary Schools in Anambra State, Nigeria. *International Journal of Innovative Social & Science Education Research*, 6(4), 43-48.
- [40] Osa, I. G., & Amos, I. O. (2014). The impact of organizational commitment on employees' productivity: a case study of Nigeria brewery, PLC. *International Journal of Research in Business Management*, 2(9), 107-122.
- [41] Pepe, A., Addimando, L., Dagdouke, J., Yagi, S., & Veronese, G. (2018). Teaching in conflict contexts: Dimensions of subjective wellbeing in Palestinian teachers living in Israel and the occupied Palestinian territory. *The Lancet*, 391, S6.
- [42] Pepe, A., Addimando, L., Dagdukee, J., & Veronese, G. (2019). Psychological distress, job satisfaction and work engagement: a cross-sectional mediation study with a sample of Palestinian teachers. *Educational Studies*, 1-17.
- [43] Perry, S. J., Hunter, E. M., & Currall, S. C. (2016). Managing the innovators: Organizational and professional commitment among scientists and engineers. *Research Policy*, 45(6), 1247-1262.
- [44] Rizvi, M. A., & Mangal, A. (2018). Analysis of job stress affecting performance of technical teachers. *PEOPLE: International Journal of Social Sciences*, 4(1).
- [45] Thum, Y. M. (2003). Measuring progress toward a goal: Estimating teacher productivity using a multivariate multilevel model for value-added analysis. *Sociological Methods & Research*, 32(2), 153-207.
- [46] Tolentino, R. C. (2013). Organizational commitment and job performance of the academic and administrative personnel. *International Journal of Information Technology and Business Management*, 15(1), 51-59.
- [47] Utami, P. P., Matin, M., & Sutjipto, S. (2018). Analysis of the Effect of Group Cohesiveness on Teacher Productivity in a State High School. In *First International Conference on Technology and Educational Science*. European Alliance for Innovation (EAI).
- [48] Yuan, P., & Liu, Y. (2017, June). The Study on the Effect of University Faculties' Job Stress on Organizational Commitment. In *2017 International Conference on Management, Education and Social Science (ICMESS 2017)*. Atlantis Press.